# IN THE U.S. PATENT & TRADEMARK OFFICE

Applicant:

AOKI

Serial #:

10/ 049,792

Attorney Docket: 542-007-2

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14 FEB. 2002; RCE filed 9 JUL. 2003

Title:

ARRAY SUBSTRATE, DISPLAY DEVICE . . .

Examiner:

T.V. DUONG

Art Unit: 2871

# INTERVIEW SUMMARY & RESPONSE TO OFFICE ACTION

Commissioner for Patents

26 MAR. 2004

PO BOX 1450

ALEXANDRIA VA 22313

Sir:

Responsive to the Office Action of 26 SEP. 2003, the extended term for response to which expires 26 MAR. 2004, and to the PTOL-413 Interview Summary mailed 8 MAR. 2004, Applicant requests reconsideration, for the reasons set forth below.

### CERTIFICATE OF MAILING

I hereby certify that this document is being deposited with the United States Postal Service as first class mail, postage prepaid, under 37 C.F.R. 1.8 on the date indicated below and is addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria VA 22313-1450.

DATE: 26 MAR. 2004

Milton Oliver

## INTERVIEW SUMMARY IN ACCORDANCE WITH MPEP 713.04

A telephone interview was held on 4 MAR. 2004 among Examiner Duong, Examiner Dudek, and Applicant's counsel, Milton Oliver. The PTOL-413 summary (Paper No. 0304) is accurate, as far as it goes. The present application is directed to an array substrate in which a problem of excessive "contact resistance" is avoided by forming certain electrodes of a high-melting-point metal, rather than low-melting-point metals as known in the prior art. The Office has relied upon USP 6,078,366, col. 7, lines 35-37, "While signal lines (110) are made of Mo-W alloy which state: here, these may alternatively be constituted from Mo-Ta alloy, Al or its alloy." Applicant's counsel pointed out, during the interview, that aluminum and its alloys are <u>low</u>-melting-point metals and argued that providing two alternatives, only one of which would be suitable for solving the "contact resistance" problem, does not constitute an "anticipation by inherency" which, as best understood, seems to be the contention of the Office. Counsel used the analogy of the problem of safely crossing a 30-foot deep, pirahna-infested river: a suggestion that either walking through the river on 10-foot long stilts, or riding across on a boat would be suitable, leads to the traveller being eaten alive 50% of the time. Examiner Duong seemed unconvinced by this argument, and Examiner Dudek did not comment upon it. Duong's position seems to be that there is anticipation if either of the suggested alternatives would lower contact resistance, and that the reference need not mention "contact resistance."

#### RECONSIDERATION OF THE \$102 AND \$103 REJECTIONS IS SOLICITED

Claims 1-3, 5-6, 8-13 and 15-18 are pending in this application. Claim 13 was rejected under §103 and the remaining claims were all alleged to be "anticipated" under §102 by DOHJO USP 6,078,366, which discloses at least 3 differing embodiments.

### ANTICIPATION BY INHERENCY REQUIRES STRICT IDENTITY OF ELEMENTS

There is a high standard for a finding of anticipation under section 102. Section 102 requires a finding that "each and every limitation is found either expressly or inherently in a single prior art reference, " PIN/NIP, Inc. v. Platte Chemical Co., 64 USPQ2d 1344 (Fed. Cir. 2002); Verve, LLC v. Crane Cams, Inc., 65 USPQ2d 1051 (Fed. Cir. 2002); Chisum on Patents, §3.02[1][b]. Claims 1-3, 5-6, 8-12 and 15-18 recite varying combinations of structural elements, many of which cannot reasonably be "read on" the DOHJO elements cited the Action of 26 SEP. 2003. Aside from these other structural features, the present independent claims recite "a signal line formed of a high melting point metal selected from the group consisting of chrome, molydenum, tantalum and alloys thereof" and this limitation, among others, must be met by the DOHJO reference in order to support a finding of anticipation under section 102.

#### AN ANTICIPATORY FEATURE MUST BE NECESSARILY PRESENT

The U.S. Supreme Court has held that accidental results, not intended and not appreciated, do not constitute anticipation; <u>Eibel Process Co. v. Minnesota & Ontario Paper Co.</u>, 261 U.S. 45 (1923), cited in Chisum on Patents, §3.03[1][f]. The fact that DOHJO accidentally included some high-melting-point alloys among his suggested electrode materials does not amount to a teaching that such materials are **necessary**, or even **preferable** to DOHJO's other (low-melting-point aluminum) alternative.

Chisum §3.03[2][b] states "Federal Circuit decisions emphasize that an anticipatory inherent feature must be consistent, necessary and inevitable, not merely possible or probable," citing In re Robertson, 49 USPQ2d 1949 (Fed. Cir. 1999);

Transclean Corp. v. Bridgewood Services, Inc., 62 USPQ2d 1865 (Fed. Cir. 2002); Trintec Indus., Inc. v. Topp-U.S.A. Corp., 63 USPQ2d 1597, 1599 (Fed. Cir. 2002) and Rosco, Inc. v. Mirror Lite Co., 64 USPQ2d 1676, 1680 (Fed. Cir. 2002). BPAI decisions make the same point. Relume Corp. v. Dialight Corp., 63 F. Supp.2d 788, 813 (E.D. Mich. 1999), aff'd 4 Fed. Appx. 893 (Fed. Cir. 2001) noted that "the fact, that three possible forms exist, precludes the argument that any one form is necessarily present." DOHJO teaches three forms: Mo-W alloy, Mo-Ta alloy or Al alloy, which precludes the argument that a high-melting-point form is necessarily present.

CLAIM TERMS MUST BE INTERPRETED IN THE LIGHT OF THE SPECIFICATION

Page 7 of the Action of 26 SEP. 2003 dismisses Applicant's arguments with respect to dependent claims 17-18, on the basis that the Merriam Webster dictionary gives one definition of "grid" as meaning "network of conductors for distribution of power" so that "grid like shape is not necessary to be parallel." Applicant respectfully urges that such an interpretation would completely disregard the context of the present invention (display substrates) and the usage of the term in the specification, and therefore is overly broad. Reconsideration of the rejection of claims 17-18 is solicited.

# THE §103 REJECTION SHOULD ALSO BE RECONSIDERED

Claim 13 has been rejected under §103 as obvious over a combination of the DOHJO USP with SAKATA, assigned jointly to ADVANCED DISPLAY, INC. (assignee of the present application) and to MITSUBISHI DENKI K.K. Page 8 of the Action of 26 SEP. 2003 reasons that it "would have been obvious" to employ the SAKATA nitridating process as a modification of the DOHJO structure

"so as to obtain a good contact resistance." However, DOHJO never raised "contact resistance" as an issue, so the <u>only</u> teaching on this point comes from a case which is partly owned by the present assignee, with the benefit of having read the present disclosure. Section 103(c) disqualifies, as prior art, certain references which

were, at the time the invention was made, "owned by the same person or subject to an obligation of assignment to the same person."

Legislation pending in Congress may extend the protection of section 103(c) to cover the present situation, if ADVANCED DISPLAY, INC. (100% owner of present application) does not already qualify as the "same person" as ADVANCED DISPLAY, INC. (50% owner of SAKATA). In any event, the Examiner is respectfully urged to reconsider whether there was sufficient motivation, as of the 19 JUNE 2000 Japanese priority date of the present application, to make the proposed combination of DOHJO with SAKATA, and whether this combination would, in fact, have resulted in the set of features recited in dependent claim 13.

### CONCLUSION

The primary reference, DOHJO, does not "anticipate" claims 1-3, 5-6, 8-12 and 15-18 because the high-melting-point metal is not "necessarily present" in the DOHJO structure, where the electrodes can optionally comprise low-melting-point aluminum. The section 102 rejection of those claims must be reconsidered.

The secondary reference, SAKATA, is half-owned by the assignee of the present application, and there is insufficient motivation to combine it with the primary DOHJO reference. Therefore, the section 103 rejection of dependent claim 13 must also be reconsidered.

Applicant respectfully submits that the claims patentably distinguish over DOHJO, SAKATA, and the other art of record, taken singly or in combination.

If the Examiner notes any remaining informalities, or wishes to make any suggestions to place the application in condition for allowance, a telephone call to Applicant's counsel is invited.

Respectfully submitted,

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Att. Docket No. 542-007-2

Attachment: text of pending claims